

Is the ordered pair a solution of the system of linear equations?

1) $-2x + 3y = 5$
 $3x + 2y = 12$
 $(2, 3)$

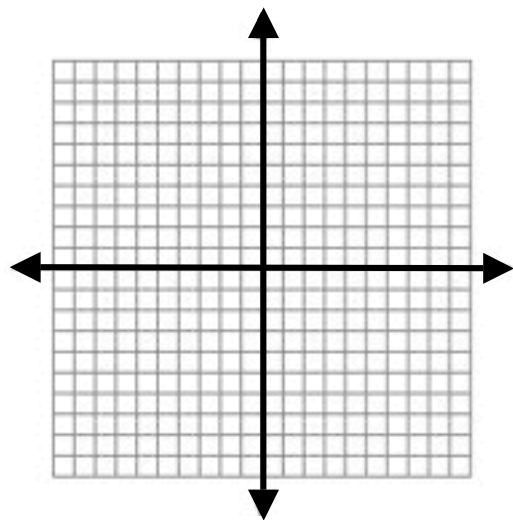
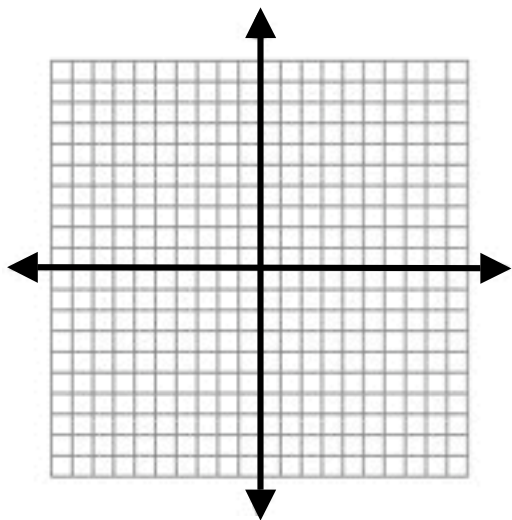
2) $2x + 5y = 23$
 $-2x + 3y = 1$
 $(-1, 5)$

3) $-5x + y = 19$
 $x - 7y = 3$
 $(-4, -1)$

Graph to solve the linear system. Check your answer mathematically.

4) $3x + 6y = 15$
 $-2x + 3y = -3$

5) $-x + y = 4$
 $2x + y = 7$



Use the substitution method to solve the linear system. Check #8.

6) $x + y = 4$
 $-5x + 2y = -6$

7) $3x = 9$
 $-x + 2y = 9$

8) $3x + y = 5$
 $2x - y = 10$

Use the elimination method to solve the linear system. Check #11.

9) $x + y = 3$
 $x + 2y = 6$

10) $x + y = 7$
 $y = -2x + 8$

11) $2u = 4v + 8$
 $3v = 5u - 13$

Solve each problem using systems of equations.

12) You are selling tickets for your school's Battle of the Bands competition. Student tickets cost \$4 and adult tickets cost \$6. You sell 450 tickets and collect \$2340. How many of each type of ticket did you sell?

13) A music store is selling CDs for \$11.50 and \$7.50. Sam bought 12 discs and spent a total of \$106. How many of each type of CD did Sam buy?

Solve each system using the method of your choice. Tell how many solutions the system has.

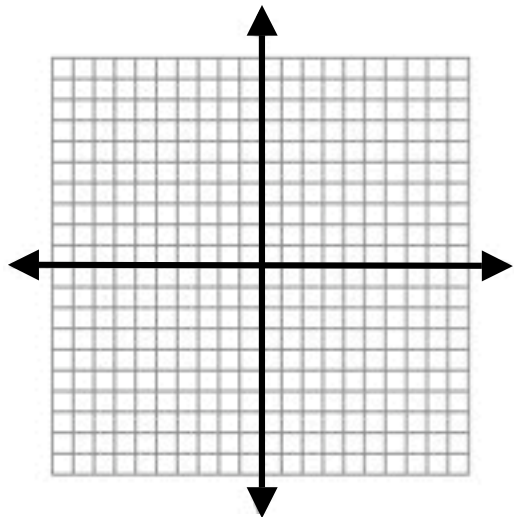
14) $2x + y = 5$
 $3y = 4x - 5$

15) $-x + 4y = 4$
 $3x - 12y = -12$

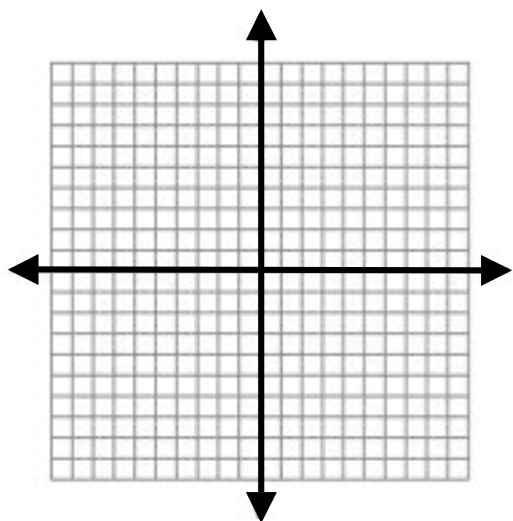
16) $6x - 2y = 10$
 $y = 3x + 12$

Graph each system of inequalities.

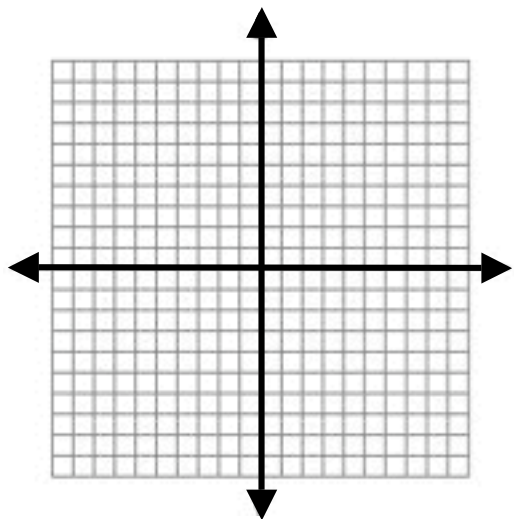
17) $y > x - 3$
 $y \leq x + 1$



18) $y \leq 2x + 3$
 $y > -x + 5$



19) $x < 4$
 $y \geq -3$
 $x - y \geq 4$



20) $x \geq 0$
 $-x + 3y \leq 6$
 $y > x$

